

What is claimed is:

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1. An appliance for administering a reduced pressure treatment to a wound comprising:

(a) an impermeable cover adapted to cover and enclose the wound and to maintain reduced pressure at the site of the wound;

(b) a seal adapted to seal said cover to tissue surrounding the wound; and

(c) reduced pressure supply means adapted to connect to a source of suction, said reduced pressure supply means cooperating with said cover to supply said reduced pressure beneath the cover.

2. The appliance as recited in claim 1 comprising a screen for preventing overgrowth of wound tissue, said screen being locatable between said wound and said cover.

3. The appliance as recited in claim 2 wherein said screen comprises a porous sheet.

4. The appliance as recited in claim 1 wherein said reduced pressure supply means comprises a screen having an open cell foam and said reduced pressure supply means includes a segment of tubing embedded within said screen.

5. The appliance as recited in claim 1 wherein said cover is sufficiently rigid to support said cover out of contact with the wound and said reduced pressure supply means comprises a suction port on said cover.

6. The appliance as recited in claim 5 wherein said seal includes a cuff around the periphery of said cover for preventing said cover from digging into the skin during the treatment.

7. The appliance as recited in claim 1 wherein said seal includes an adhesive material on the cover for securing said

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cover to the tissue surrounding the wound.

8. An apparatus for treating a wound comprising:

(a) a vacuum system for producing a reduced pressure;
(b) a reduced pressure appliance operably connected with said vacuum system for applying said reduced pressure to the wound, the appliance comprising:

(i) an impermeable cover adapted to cover and enclose the wound and to maintain reduced pressure at the site of the wound;

(ii) a seal adapted to seal said cover to tissue surrounding the wound; and

(iii) reduced pressure supply means adapted to connect with the vacuum system for supplying said reduced pressure to the wound.

9. The apparatus as recited in claim 8 wherein said vacuum system includes a collection device for collecting fluid aspirated from the wound.

10. The apparatus as recited in claim 9 wherein said collection device includes means for halting said application of reduced pressure to the wound when said fluid exceeds a predetermined quantity.

11. The apparatus as recited in claim 8 wherein said reduced pressure is from about 2 in. Hg below atmospheric pressure to about 7 in. Hg below atmospheric pressure.

12. A method for treating a wound comprising the steps of:

(a) applying a reduced pressure to the wound; and
(b) maintaining reduced pressure until the wound has progressed toward a selected stage of healing.

13. The method as recited in claim 12 wherein said reduced pressure is from about 2 in. Hg below atmospheric

pressure to about 7 in. Hg below atmospheric pressure.

14. The method as recited in claim 12 wherein said applying step comprises steps of:

- (a) locating an impermeable cover over the wound, said cover having a suction port;
- (b) sealing the periphery of said impermeable cover to tissue surrounding the wound; and
- (c) operably connecting said suction port with a vacuum system for producing said reduced pressure.

15. The method as recited in claim 14 further comprising the step of placing a porous screen over the wound prior to said locating step.

16. A method of treating a wound comprising the steps of:

- (a) securing an appliance for applying reduced pressure to the wound; and
- (b) providing reduced pressure to said appliance in alternating intervals of application and non-application.

17. The method as recited in claim 16 wherein said reduced pressure is from about 2 in. Hg below atmospheric pressure to about 7 in. Hg below atmospheric pressure.

18. A method of pretreating a skin flap to promote attachment of the flap to a wound comprising the step of applying reduced pressure to a region of skin tissue adjacent to the wound prior to detachment of said skin tissue adjacent to the wound to form the flap from said region of skin.

19. An apparatus for treating a wound comprising:

- a. a vacuum system for producing a reduced pressure; and
- b. a reduced pressure appliance operably connected with said vacuum system for applying said reduced

pressure to the wound, the appliance including:

- i. an impermeable cover adapted to cover and enclose the wound and for maintaining reduced pressure at the site of the wound;
- ii. a seal adapted to seal said cover to tissue surrounding the wound;
- iii. reduced pressure supply means for connection with the vacuum system for supplying said reduced pressure to the wound; and
- iv. a screen for preventing overgrowth of wound tissue, said screen being located between said wound and said cover.

20. The apparatus as recited in Claim 19 wherein said vacuum system includes a collection device for collecting fluid aspirated from the wound.

21. The apparatus as recited in Claim 19 wherein said reduced pressure is from about 2 in. Hg below atmospheric pressure to about 7 in. Hg below atmospheric pressure.

22. An apparatus for treating a wound comprising:
- a. a vacuum system for producing a reduced pressure; and
 - b. a reduced pressure appliance operably connected with said vacuum system for applying said reduced pressure to the wound, the appliance including:
 - i. an impermeable cover adapted to cover and enclose the wound and for maintaining reduced pressure at the site of the wound, wherein said cover comprises a flexible sheet;
 - ii. a seal adapted to seal said cover to tissue surrounding the wound; and
 - iii. reduced pressure supply means for connection with the vacuum system for supplying said reduced pressure to the wound.

23. The apparatus as recited in claim 22 wherein said vacuum system includes a collection device for collecting fluid aspirated from the wound.

24. The apparatus as recited in claim 22 wherein said reduced pressure is from about 2 in. Hg below atmospheric pressure to about 7 in. Hg below atmospheric pressure.

25. A method of treating a wound comprising the steps of:

- a. applying a reduced pressure to the wound; and
- b. maintaining said reduced pressure until the wound has progressed toward cessation of partial thickness burn progression.

26. The method as recited in claim 25 wherein said reduced pressure is from about 2 in. Hg below atmospheric pressure to about 7 in. below atmospheric pressure.

27. The method as recited in claim 25 wherein said applying step comprises the steps of:

- a. locating an impermeable cover over the wound, said cover having a suction port;
- b. sealing the periphery of said impermeable cover to tissue surrounding the wound; and
- c. operably connecting said suction port with a vacuum system for producing said reduced pressure.

28. A method of treating a wound comprising the steps of:

- a. applying a reduced pressure to the wound; and
- b. maintaining said reduced pressure until the wound has progressed toward at least a 50% reduction in bacterial density in the wound.

29. The method as recited in claim 28 wherein said reduced pressure is from about 2 in. Hg below atmospheric

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pressure to about 7 in. Hg below atmospheric pressure.

30. The method as recited in claim 28 wherein said applying step comprises the steps of:

- a. locating an impermeable cover over the wound, said cover having a suction port;
- b. sealing the periphery of said impermeable cover to tissue surrounding the wound; and
- c. operably connecting said suction port with a vacuum system for producing said reduced pressure.

31. An assembly for supplying reduced pressure beneath an impermeable cover sealed to tissue surrounding a wound, the assembly comprising:

- a. an open cell foam screen adapted to prevent overgrowth of wound tissue and to distribute the reduced pressure [to] over the wound; and
- b. a tube member embedded in said screen adapted to extend from beneath the cover and to supply the reduced pressure to said foam.

32. The assembly of claim 31 wherein said tube member has a side port within the foam for promoting substantially uniform application of reduced pressure to the wound.

33. The assembly of claim 31 wherein said foam screen is adapted to be conformed to the shape and size of the wound.

34. An assembly for supplying reduced pressure beneath an impermeable cover sealed to tissue surrounding a wound, the assembly comprising:

- a. an open cell foam screen adapted to distribute the reduced pressure over the wound; and
- b. a tube member embedded in said screen adapted to extend from beneath the cover and to supply the reduced pressure to said foam.

- a. an impermeable cover adapted to cover and enclose the wound and for maintaining reduced pressure at the site of the wound;
- b. a seal adapted to seal said cover to tissue surrounding the wound;
- c. reduced pressure supply means for supplying said reduced pressure to the wound; and
- d. a screen for preventing overgrowth of wound tissue, said screen being located between said wound and said cover.

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